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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,750	05/12/2005	Masakazu Fujiki	00862.023324.	1633

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EXAMINER	
PARK, JEONG S	

ART UNIT	PAPER NUMBER
2454	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/534,750	FUJIKI ET AL.	
	Examiner	Art Unit	
	JEONG S. PARK	2454	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 November 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,8,9,11,18 and 36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,8, 9, 11, 18 and 36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is in response to Application No. 10/534,750 filed on 5/12/2005. The amendment presented on 11/20/2008, which amends claims 1 and 18, is hereby acknowledged. Claims 1, 8, 9, 11, 18 and 36 have been examined.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 8, 9, 11, 18 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the manipulation request input" in lines 11-12. There is insufficient antecedent basis for this limitation in the claim. Claim 18 is also rejected for the same reason.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 8, 9, 11, 18 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Negishi et al. (hereinafter Negishi)(U.S Patent No. 6,571,278 B1) in view of Birkler et al. (hereinafter Birkler)(U.S. Publication No. 2002/0129103 A1).

Regarding claims 1, 18 and 36, Negishi teaches as follows:

an information processing method for maintaining, in a system in which each of a plurality of client processes (computer A and computer B, 1 and 3 in figure 1 respectively) connected via an information transmission medium (communication medium, 19 in figure 1) holds and uses shared data (replica contents) to be shared by the plurality of client processes, consistency of shared data held by the respective plurality of client processes (computer for maintaining consistency of replica contents by interchanging data modification with another computer, see, e.g., col. 2, lines 25-27), comprising:

an input step of inputting an input manipulation request (application, 5 in figure 1, issues a request to the replica controller, 7 in figure 1, for the data modification, see, e.g., col. 4, lines 40-44) generated by its own client process (wherein the computer A receives the modification request internally from the application, see, e.g., figure 1);

a determining step of determining a mode, based on designation information used to designate a mode to be adopted to each of a plurality of items included in the shared data, (the order of the replica in the replica updating is designated, see, e.g., col. 4, lines 40-50), and manipulation contents of the input manipulation request, from a plurality of modes including a first mode, a second mode, and a third mode (the timing of replica updating in accordance with the received modification request is determined by designated timing options such as ordinary, backward flush and two way flush designation, see, e.g., col. 2, lines 36-64);

a processing step of executing a process corresponding to the manipulation request input in the input step (the application (5 in figure 1) issues a request to the

replica controller (7 in figure 1) for the data modification, see, e.g., col. 4, lines 40-44, wherein the computer A receives the modification request internally from the application) or a received manipulation request generated by another client process (the replica controller execute a modification request received at reception queue from computer B via communication medium, see, e.g., col. 5, lines 16-24 and col. 7, lines 21-23),

wherein the determining step determines that the mode corresponding to the manipulation request is the first mode or the second mode (the timing of replica updating in accordance with the received modification request is determined by designated timing options such as ordinary, backward flush and two way flush designation, see, e.g., col. 2, lines 36-64), when the manipulation contents of the input manipulation request is based on a user's interactive manipulation (the user interface is inherently included in any computer system since the application in computer A, 5 in figure 1, generates the modification request with the selection of update mode, see, e.g., col. 4, lines 26-39 and figure 1),

wherein, with regard to execution of the received manipulation request, the processing step includes;

a receiving step of receiving the received manipulation request generated by a client process other than its own client process (the replica controller execute a modification request received at reception queue from computer B via communication medium, see, e.g., col. 5, lines 16-24 and col. 7, lines 21-23), via a server process (it would be obvious to designate a server process for efficient communication between

multiple computers since Negishi teaches of communications between more than two computers, see, e.g., col. 4, lines 26-33); and

an execution step of executing a process corresponding to the received manipulation request in order of receiving the received manipulation request (forward flush designation, see, e.g., col. 4, lines 53-57),

and wherein, with regard to execution of the input manipulation request input in the input step, the processing step includes:

a sending step of sending, when the manipulation request requests a manipulation of the shared data, request information that represents the input manipulation request to the server process (packet transmitter, 13 in figure 1, generates a necessary packet and transmits it to the computer B via a communication medium, 19 in figure 1, see, e.g., col. 6, lines 4-6 and step 1200 in figure 2 and the computer B stores the received packet in the reception queue, see, e.g., col. 6, lines 24-34);

a reception step of receiving response information corresponding to the request information sent in the sending step, from the server process (computer B receives response BT and SBT from computer A which were sent to computer A previously and then generating response confirmation BT and SBT and comparing it with the sent packet, see, e.g., col. 6, lines 24-34, therefore each computer can acknowledge the receiving confirmation by transmitting and comparing BT and SBT values);

a manipulation execution step of executing a manipulation for the shared data in accordance with the input manipulation request or the response information received in the reception step (a timing of update execution for the replica in accordance with the

received modification request, see, e.g., col. 2, lines 25-42);

wherein, in a case where the determining step determines that the mode corresponding to the input manipulation request input in the input step is the first mode, the manipulation execution step manipulates the shared data in response to the input manipulation request (the replica is updated in accordance with the modification request from the application) and the sending step sends the request information indicating the input manipulation request to the server process (a transmitter for transmitting to another computer a modification request for data in the replica and the controller may make the third and fourth numbers (the values of response BT and SBT) to be included in the modification request, see, e.g., col. 3, lines 16-23);

wherein, in a case where the determining step determines that the mode corresponding to the input manipulation request input in the input step is the second mode,

the sending step sends the request information indicating the manipulation request to the server process in response to the input manipulation request (the replica is updated in accordance with the modification request from the application and a transmitter for transmitting to another computer a modification request for data in the replica and the controller may make the third and fourth numbers (the values of response BT and SBT) to be included in the modification request, see, e.g., col. 3, lines 16-23);

the manipulation execution step manipulates the shared data based on the input manipulation request indicated by a reception information (received response values of

the previously transmitted packet) in response to reception of the reception information (transmit a packet which includes the values of response BT and SBT in the reception queue and the values of the response BT and SBT are used to change the values of the response confirmation BT and SBT that are stored in the transmission queue of the computer B, see, e.g., col. 6, lines 24-34, therefore the values of the response confirmation is updated by using the value of the response, see, e.g., col. 6, lines 34-49);

replica controller (7 in figure 1) executes a modification request generated from application (5 in figure 1) and stores the replica in the data storage device (17 in figure 1)(see, e.g., col. 4, lines 40-44 and col. 7, lines 16-30);

when the modification request is executed, the replica controller (7 in figure 1) sends BT and SBT value included in packet 1 to the other process (computer B) for response back for the packet executed the modification request in computer A (see, e.g., col. 7, lines 20-41); and

using response confirmation values of BT and SBT for a transmission confirmation of the sent packet in order to discard the sent packet from the transmission queue (see, e.g., col. 7, lines 43-52).

Therefore, Negishi teaches all the limitations of updating or manipulating a shared data between multiple computers.

Negishi does not teach of using timeout method in order to execute a manipulation based on response message timing from the server.

Birkler teaches as follows:

a request/response protocol implementation between a client and a server for updating presence information (see, e.g., page 2, paragraph [0020], lines 1-4 and figure 4); and

implementing timeout method in order to response back to the requested party (once expiration of the timeout period is detected, an update response is sent back to the client from the server, see, e.g., page 2, paragraph [0023], lines 13-17 and figure 10).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Negishi to include a request/response protocol implementation between a client and a server and a timeout method as taught by Birkler in order to provide two ways communications by acknowledgement or response message from the server before modifying or updating the shared data of the client and two ways communications in case of loss of response message due to the transmission error by implementing the well-known timeout concept in the art (the well-known timeout concept comprises waiting certain period of time for the response message and retransmitting the previously sent data or transmitting the next data when a response message is not received).

Regarding claim 8, Negishi teaches as follows:

a step of providing a user interface that allows a user to select an object display corresponding to a desired item and to designate a desired update mode (the user interface is inherently included in any computer system since the application in computer A, 5 in figure 1, generates the modification request with the selection of

update mode, see, e.g., col. 4, lines 26-39 and figure 1).

Regarding claim 9, Negishi teaches as follows:

a mode selected through the user interface is reflected on the shared data (data storage device) of the plurality of client processes (multiple computers)(the data storage device, 17 in figure 1, stores a replica generated by replica controller, 7 in figure 1, based on the modification request including update mode and functions as an ordinary database, see, e.g., col. 5, lines 25-29).

Regarding claim 11, Negishi in view of Birkler teach all the limitations of claim as presented above per claim 1 because Birkler teaches the implementation of timeout method, the step of setting the time limit of manipulation execution is inherently included.

Response to Arguments

6. Applicant's arguments filed 11/20/2008 have been fully considered but they are not persuasive.

A. Summary of Applicant's Arguments

In the remarks, the applicant argues as followings:

1) Negishi does not teach or suggest, among other features, executing a process corresponding to a received manipulation request generated by another client process and executing a process correspond to an input manipulation request generated by its own client process, with the input manipulation request having three different modes.

B. Response to Arguments

In response to argument 1) Negishi teaches as follows:

executing a process corresponding to a received manipulation request generated by another client process (the replica controller execute a modification request received at reception queue from computer B via communication medium, see, e.g., col. 5, lines 16-24 and col. 7, lines 21-23);

executing a process correspond to an input manipulation request generated by its own client process (the application (5 in figure 1) issues a request to the replica controller (7 in figure 1) for the data modification, see, e.g., col. 4, lines 40-44, wherein the computer A receives the modification request internally from the application); and

with the input manipulation request having three different modes (the order of the replica in the replica updating is designated, see, e.g., col. 4, lines 40-50 and the timing of replica updating in accordance with the received modification request is determined by designated timing options such as ordinary, backward flush and two way flush designation, see, e.g., col. 2, lines 36-64).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEONG S. PARK whose telephone number is (571)270-1597. The examiner can normally be reached on Monday through Friday 7:00 - 3:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. S. P./
Examiner, Art Unit 2454

February 3, 2009

/Dustin Nguyen/
Primary Examiner, Art Unit 2454